الصف الرابع الابتدائي ٢٠٢٣

بنك أسئلة

المتميز

أ/ محمود سعيد

Elmotamyez questions Bank

SCIENCE

Final Revision

By

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cartoon science

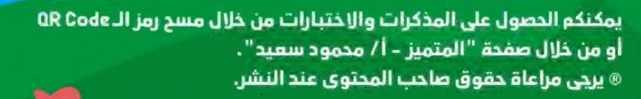
4 الصف الرابع











EL MOTAMYEZ - SCIENCE Questions Bank

FINAL REVISION

QUESTION 01 Choose The Correct Answer

1. When a panther chameleon stands on leaves of trees, the color of its scales changes into......
   - (a) white (b) green (c) blue (d) black

2. The fur of fennec fox protect it from.........
   - (a) wind (b) rains (c) hot weather (d) cold weather

3. One of the behavioral adaptations that help the animal protect itself from enemies
   - (a) Camouflage (b) extinction (c) immigration (d) reproduction

4. Bat is......animal.
   - (a) nocturnal (b) morning (c) Harmful (d) don't fly

5. .... is covering body arctic fox
   - (a) heavy hair (b) heavy skin (c) thick fur (d) many feathers

6. ....panting to lower her body temperature.
   - (a) Whales (b) Lions (c) Foxes (d) Bats

7. Animals that live in a hot environment have .... ears to help her, and allow heat to escape to be cool.
   - (a) small (b) short (c) sharp (d) long

8. Fish extracts oxygen out of the water by ......
   - (a) skin (b) gills (c) lungs (d) fins

9. which of the following can turn its head in all directions ?
   - (a) lizards (b) owls (c) cats (d) snakes

10. When you determine a sweet or bitter taste, you have used ....
    - (a) the tongue (b) the eye (c) the ear (d) the nose

11. The sense you use to identify the scent of a perfume.
    - (a) taste (b) sight (c) smell (d) hearing

12. Your sensation of hot weather depends on sensory receptors in the ......
    - (a) eyes (b) skin (c) nose (d) ears

13. What carries the message from your eyes to your brain when you see something...
    - (a) nerves (b) muscle (c) veins (d) glands



14 The ....system helping us to translate messages that come from our surroundings, such as smells and sounds.
- (a) respiratory (b) digestive (c) nervous (d) circulatory

15 .... energy affects the sensory receptors in the eye causing vision.
- (a) Magnetic (b) Light (c) Kinetic (d) Sound

16 The organ which is responsible for smelling sense
- (a) ear (b) tongue (c) nose (d) eye

17 All the following components are from the nervous system except.................
- (a) spinal cord (b) heart (c) nerves (d) brain

18 The ....is the main control center in your body.
- (a) nerve (b) brain (c) spinal cord (d) sense

19 The system helps us translate messages that come from our surroundings, such as smells and sounds
- (a) respiratory (b) digestive (c) nervous (d) circulatory

20 When can object comes suddenly close to your eyes............... occurs
- (a) reflex action (b) respiration (c) sensory organ (d) sleeping

21 All the following living organisms have Tapetum Lucidum, except...........
- (a) snakes (b) fishing cats (c) dogs (d) horses

22 Which type of energy does the sun provide Earth?
- (a) light (b) gravity (c) chemical (d) mechanical

23 The organ responsible for the sense of sight
- (a) the ear (b) the tongue (c) the nose (d) the eye

24 Animals can communicate with each other through..............
- (a) sounds and light (b) talking (c) writing (d) reading

25 All of these materials are opaque except
- (a) wood (b) human body (c) book (d) water

26 Which of the following is a source of light?
- (a) the moon (b) our eyes (c) fire (d) a mirror

27 To detect the place of a table in a completely dark room, you can depend on
- (a) sight sense (b) touch sense (c) taste sense (d) hearing sense

28 Each of the following is considered a source of light except ....
- (a) the fire (b) the sun (c) the lamp (d) the eye



29 ....eyes have a thin membrane in the back of the eye.

ⓐ Human ⓑ Tarsier monkey ⓒ Snake ⓓ Bats

30 All of the following are transparent objects, except ....

ⓐ glass ⓑ water. ⓒ paper ⓓ air

31 it produces chemical reaction inside its body.......................

ⓐ butterflies ⓑ fireflies beetles ⓒ house flies ⓓ owl

32 the mating season of humpback whales

ⓐ summer ⓑ winter ⓒ spring ⓓ fall

33 Both tarsier and owl, ...

ⓐ can swim ⓑ can fly ⓒ are nocturnal animals ⓓ same species

34 What happens to light when it hits a rough surface?

ⓐ scattering ⓑ reflection ⓒ absorption ⓓ refraction

35 Which of the following organs are working together for seeing different objects?

ⓐ Nose and brain ⓑ Eyes and brain ⓒ Ears and brain ⓓ Tongue and brain

36 There is a tapetum lucidum in all of the following except ....

ⓐ the horse ⓑ the cat ⓒ the human ⓓ the dog

37 All the following considered as a source of light except ....

ⓐ sun ⓑ candle ⓒ fire ⓓ moon

38 Which of the following allows the light to pass through it? ....

ⓐ A rock ⓑ Moon ⓒ Wood ⓓ Glass

39 What property of light helps you see yourself in a mirror?

ⓐ refraction ⓑ reflection ⓒ absorption ⓓ relativity

40 Reading and writing are common types of communication between ....

ⓐ human ⓑ animals ⓒ birds ⓓ plants

41 Raising the thumb up or lower it down is a kind of ....

ⓐ colors ⓑ codes ⓒ waves ⓓ lights

42 Bats use their .... To get information about their surroundings in the dark

ⓐ eyes ⓑ tongue ⓒ ears ⓓ hands

43 The force that slows down (decreases) the speed is called ....

ⓐ push ⓑ gravity ⓒ friction ⓓ pull

44 Senses organs collect information and send signals to ....for processing and understanding

a) stomach b) brain c) hands d) ear

45 When an object is in motion, this means that its ....changes

a) color b) shape c) size d) position

46 When you move something towards you, this represents......

a) pushing force b) light energy c) pulling force d) sound energy

47 All the following represent the pushing force except to ......

a) kick a ball b) press on switch c) close drawer d) lifting up a bag.

48 When you sit on a chair, the force of gravity is ....and holding you in the chair

a) pull you upward b) pull you downward c) push you upward d) push you downward

49 Push or pull actions are considered as types of ....

a) force b) device c) energy d) adaptation

50 The force that pulls the objects down toward the center of the earth is ...

a) gravity b) pushing c) pulling d) wind

51 The force that occurs when an object rubs against another object is called.....

a) friction b) gravity c) push d) pull

52 The airbag is made of..........

a) carton b) nylon c) rubber d) cotton

53 Kinetic energy isn't affected by the............

a) mass b) speed c) color d) weight

54 All of the following are examples of pulling force, except ....

a) kicking a ball. b) pulling the rope.
c) opening the desk's drawer. d) lifting up your bag.

55 When a body moves forward, the change that occurs is in ....

a) the position of the body. b) the Earth's gravity.
c) the size of the body. d) the mass of the body.

56 Objects need a force to move, this force is represented in (called) ....

a) pushing only b) pulling only
c) pushing and pulling together d) the Earth gravity only

57 When a ball stands on the ground without moving, the forces acting on it are ......

ⓐ balanced. ⓑ unbalanced ⓒ push it up ⓓ not equal

58 Which of the following can store energy ?

ⓐ battery ⓑ wire ⓒ plastic ⓓ rubber

59 The energy gained by a ball when it falls from above is ....

ⓐ Potential energy ⓑ kinetic energy ⓒ light energy ⓓ chemical energy

60 When an object moves down a ramp, its stored potential energy ....

ⓐ increases ⓑ doesn't change
ⓒ changes to a less active form of energy ⓓ changes to a more active form of energy

61 The energy that is stored in an object due to its position, is known as .....

ⓐ kinetic ⓑ potential ⓒ electric ⓓ chemical

62 Chemical energy stored in batteries is considered a form of .... energy

ⓐ potential ⓑ kinetic ⓒ heat ⓓ light

63 Chemical energy can be stored in ....

ⓐ food only ⓑ battery only ⓒ television and food ⓓ food and battery

64 The force that causes an object to move a distance is called ....

ⓐ work ⓑ potential ⓒ gravity ⓓ pull

65 The ability to do work is ....

ⓐ energy ⓑ force ⓒ push ⓓ pull

66 📖 The speed of a car that travels 200 meter in 2 second is......m/s

ⓐ 20 ⓑ 40 ⓒ 100 ⓓ 200

67 How can we calculate the speed of an object ?

ⓐ distance ÷ time ⓑ distance + time
ⓒ distance x time ⓓ distance - time

68 Which of the following is a measuring unit of speed?

ⓐ hr/km ⓑ sec/m ⓒ kg/sec ⓓ m/sec

QUESTION 02 — Complete using words between brackets

1. ....causes many problems for the lungs (Breathing – pollution)
2. Fish breathe ..... gas which dissolved in water (Oxygen - carbon dioxide)
3. .... mix and grind food inside the mouth (Teeth only - Teeth and tongue)




4. Mangroves trees grow in......(Fresh water - salt water)
5. During exhalation,......... gas comes out of the lung. (Oxygen -Carbon dioxide)
6. The lungs are one of the important organs in the ....system. (Respiratory - Digestive)
7. The diaphragm rises up during the ....operation (inhalation - exhalation)
8. A tube with muscles that help push food into the stomach, called...... (Trachea – esophagus)
9. 📖 The fatty layer under the animal's skin to warm it is considered a............adaptation (structural – behavioral)
10. An animal that can escape from enemies because of the length of its hind leg. (Arctic fox - jerboa)
11. The dolphin can locate its prey through its sense............(hearing - sight)
12. The eyes send messages to ...... through the nerves.(brain-spinal cord)
13. Sensory receptors send a message........... (from the brain to the muscles- from the sensory organs to the brain)
14. The time that the body takes to receive information from the environment and (reaction time-reflex action)
15. The echo sound feature depends on ....(Hearing sense - Sight sense)
16. The skin is an important organ of the system... (Respiratory - Nervous)
17. The spinal cord is an important organ of the ....system (Nervous - Digestive)
18. The car slow down its speed when it runs out of fuel, as a result of .... (tension – friction)
19. The (balanced – unbalanced) forces cause the object to move .
20. The force that pulls things down is .... (friction – gravity)
21. When a person push car forward, his body begins to sweat heavily because his body .... his stored energy (increase – consumes)
22. The gas oven converts .... energy stored in the natural gas into heat energy (chemical - electrical)
23. During a car crash, the .... is inflated with a gas to provide a soft cushion.(seatbelt - airbag)

24 When objects crash with each other, ... transfers between them. (distance - energy)

25 As a result of hitting a ball with a bat, the ....of the ball will change (direction – mass)

26 Speed is a........................ quantity.(physical- chemical)

27 Fast objects cause.................... dangers than the slow objects.(less- more)

28 The big trucks need.................. to move. (big engines -small engines)

29 When the car fuel is completely runs out, the car's.......... becomes zero. (mass - speed)

30 The car needs............. to move.(fuel - water)

31 If Noor travels with her bicycle a distance of 10 km in two hours, then she is moving at a speed of (10 - 5) km/hr

32 Cats' eyes are adapted to night vision due to the presence of .... Behind their eyes (Tapetum lucidum - small eyes)

33 When light falls on an object and the light.........,so we can see this object. (absorb - reflects)

34 The eye sends messages to .... through the nerves. (brain - spinal cord)

35 When light is absorbed by an opaque object, ... is formed. (tapetum lucidum – shadow)

36 .... is from the opaque objects. (Carton - Glass)

37 Tarsier Monkey can turn its (eyes-head) like owls.

38 Light rays travel in the form of (curved - straight) lines in air.

39 Bees can communicate with each other by..................(dancing - smell)

40 The songs of Hamp back whales have a....................pitch in summer. (higher – lower)

41 From the organs that we can use to end or receive the code (eye – heart)

42 .... are forms of codes(thumb up and down - swimming)

43 Humpback whales communicate with each other through the ....sense (hearing - smelling)

QUESTION 03 Put (√) or (x) or the following statements:

1. The ears of arctic fox are longer than those of fennec fox ( )
2. All type of sharks live in fresh water. ( )
3. Foxes have a strong sense of hearing. ( )
4. The respiratory system is responsible for the entry of air into the body. ( )
5. Exhaled air is loaded with oxygen ( )
6. When running and making an effort, the number of breathing times decreases . ( )
7. As the speed increases, the amount of fuel used decreases. ( )
8. The feet of the penguin do not freeze because they have a layer of fat. ( )
9. Man cannot restore the ecosystem with any way ( )
10. The migration of birds to search for food is considered a form of behavioural adaptation ( )
11. Some animals that live in cold have a long ears; To help it to maintain the body temperature ( )
12. Plants need long roots that extend deep into the soil to survive in the water scarce ( )
13. Animals digging trenches is a form of structural adaptation ( )
14. The mass of a moving body affects its speed. ( )
15. After collision, the air bag deflates the same speed as it inflates ( )
16. The sense of hearing of dolphin is stronger than that of human ( )
17. The ear is the sense organ responsible for seeing objects ( )
18. The brain responsible for processing information ( )
19. Bats use their sense of smell to avoid dangers ( )
20. Snakes have the ability to rotate their heads in all directions ( )
21. A person can identify food which is not good through the sense of hearing ( )
22. Bees can know the sweet taste by their sense of smell ( )
23. The nervous system works separately from the five senses. ( )
24. The skin is the sensory organ that makes you feel the smooth of the cloth ( )

25 Nocturnal animals have eyes larger than human ( )
26 Cats have excellent night vision, while snakes and bats are not ( )
27 Tarsier cannot move its big eyes in their sockets like owl ( )
28 Wood is a transparent object that allows light to pass through it ( )
29 If I can see my face clearly on a surface, this means that it is a smooth, shiny surface ( )
30 honeybees use movement to communicate with each others ( )
31 The human eyes can see in the dark clearly. ( )
32 Tarsier Monkey and owl have poor night vision. ( )
33 The moon is a source of light ( )
34 The wooden board reflects light less than the mirror ( )
35 Human has a tapetum lucidum in his eye to help him see at night ( )
36 painted surface reflects light in one direction ( )
37 Some animals can see at night, such as a wild cat ( )
38 shadow formed when light hits transparent object ( )
39 Both humans and animals need a source of light to see ( )
40 The opaque materials do not let the light pass through ( )
41 Tapetum lucidum of fishing cat considered as a structural adaptation. ( )
42 Fishing cat has a mirror-like membrane on the back of the eye ( )
43 Whales sing with a high pitched sound during the mating season ( )
44 Humpback whales can sing under water ( )
45 In order to translate the code, the brain must identify it ( )
46 Animals can use more than one senses to communicate with each other ( )
47 Bees can know the sweet taste by their sense of smell ( )
48 Both Morse code and humpback whale can use sound energy in communication ( )
49 Bats use their sense of smell to avoid dangers ( )
50 Air resists the motion of a car. ( )
51 Drivers should drive as fast as possible to avoid accidents ( )
52 The stopping object can't move until a force acts on it ( )

53 Gravitational force is an upward pulling force ( )

54 When a pen falls down from your hand, the acting force is the gravity force ( )

55 When the static body is affected by balanced force, the body moves ( )

56 The seesaw moves up and down because the forces that act on it are unbalanced ( )

57 When the position of the body changes from a fixed point, the body moves ( )

58 The force that slows down or decreases the speed of an object is gravity. ( )

59 Gravity pulls objects towards the center of the Earth. ( )

60 Any moving object has a form of energy known as kinetic energy. ( )

61 When the roller coaster slides down fast, its kinetic energy increases ( )

62 The moving objects only have energy, while the objects that don't move have no energy ( )

63 When you kick a ball, kinetic energy is produced ( )

64 As the height of an object from the Earth's surface increases, its potential energy decreases ( )

65 In the electric fan, the kinetic energy is converted into electric energy. ( )

66 Energy is neither destroyed nor created from nothing. ( )

67 A static ball moves on the ground if it is affected by a force. ( )

68 The chemical energy in a battery can be converted into electrical energy. ( )

69 Energy is the ability to do work ( )

70 Seatbelt is one of safety equipment in cars. ( )

71 The high-speed moving objects face less dangers than the slower objects. ( )

QUESTION 04 Complete the following sentences

1. Panther chameleon puffs up its body with air for defense which is considered _........................ adaptation

2. Fish breath _........................ gas which dissolved in water .

3. The system that digests food to produce energy is ....
4. Chameleons can move each of their eyes in a different direction, this adaptation helps them to ....
5. Leaves of plants that float above the surface of the water are so wide that they can ....
6. Animals that have a thick layer of fat under the skin are animals that live in a ....environment
7. A tube with muscles that helps to push food into the stomach, is called ....
8. The dolphin has sharp sense of....................
9. The eye sends messages to.................... through the nerves.
10. The spinal cord is an important organ of the.................... system.
11. The form energy that can be seen is....................energy.
12. Air and water are ....materials and you can see things through them
13. Some animals have the ability to see in the dark because of....................
14. Smooth surfaces reflect light in....................direction.
15. I saw an eye shining in the dark, this animal could be ....
16. You can see the objects due to the.................... of light rays to the eyes
17. The eye pupil of the owl and cats is .... than the eye pupil of the human
18. ...., ...and ....are sources of light
19. Fireflies communicate with each other by producing a....................
20. Morse code is way of communication depending first on ....sense
21. The echo is turned in to vibrations in the ....that is good by blind people .
22. The winter months are considered as the ....season for humpback whales.
23. A group of ants sends ....message to communicate with each other.

24 Bats cannot see in the dark, but they hunt their prey at night because of.....................

25 Both fireflies and honey bees use the sense of ....in their communication .

26 If the mass of an object decreases this mean that its kinetic energy ....

27 The energy which is stored in a ball at the top of a hill is.....................

28 Airbags absorbs the ....of the car during collision..

29 When objects collide with each other, ...is transferred between them.

QUESTION 05 Write the scientific term

1. A type of adaptation that helps an animal to hide ( )
2. A liquid substance in the mouth that moistens food and begins to break it down ( )
3. A change in the body structure of a living organism to survive ( )
4. A system that helps in breaking down food into smaller parts ( )
5. A process of breaking down food into smaller parts that the body cells absorb and use to get energy and growth ( )
6. A change in the behaviors or acts of a living organism to survive ( )
7. A gas presents in air that living organisms breath during respiration process ( )
8. A group of organs that work together to perform a specific job ( )
9. The first organ in digestive system ( )
10. A feature in the bull shark, in which the upper surface of its body is darker than lower surface ( )
11. The object which allows light to pass through it ( )
12. They are materials reflect the light rays in one direction ( )
13. A type of surface that reflects light in different direction. ( )

14	An animal can not move its eyes in their sockets	( )
15	it is a visible form of energy that travels in form of waves	( )
16	A mirror like a membrane at the back of the fishing cat's eye .	( )
17	A tool used by the man works as the eyes of fishing cats at night.	( )
18	Sense organ that can detect light energy	( )
19	The force that pulls objects toward the center of the earth .	( )
20	It is a push or pull that is applied to an object cause it to change its position	( )
21	it is the ability to do work	( )
22	it is a force that causes an object to move a distance	( )
23	The energy that the object gains due to its motion	( )
24	The form of energy that increases when the speed of an object increases	( )
25	The stored energy in an object due to its position	( )
26	The process in which two objects or more crash into each other and includes an energy	( )
27	Safety equipment used to prevent car passengers from moving forward when the car stops suddenly	( )
28	safety equipment provide a soft cushion, when it inflates automatically with a gas during collision	( )
29	A heavy steel ball thot swings on a cable and it is used in destruction of buildings parts	( )

QUESTION 06 Give reason..... ?

1. Owls can hunt during the night

....

2. You can see an object placed behind a glass cup

....

3. The eyes of human do not glow like dog cats in the dark

....

4. fishing cat eyes glow in the dark

....

5. nocturnal animals can see in the dark

....

6. when light fall on object we can see it

....

7. moon is not considered as a source of light

....

8. Humans use reading, writing and speaking

....

9. Some Animals use echolocation

....

QUESTION 07 What happened if .... ?

1. if a firefly wants to attract a mate to reproduce?

....

2. A danger becomes close to the colony of ants.

....

3. The sound waves produced by a bat hits an insect.

....

4. when the mass of a moving body increases, as it moves down wards along a ramp.

....

QUESTION 08 cross the odd word

1. Penguin - Polar bear - Snake - Arctic fox
2. Cat – Dog – Deer - Bat
3. Wood - Glass cup – Book - Wall
4. Lamp-Fire-Moon-Candle
5. Bats – fireflies - blind person's cane - dolphins
6. Sound energy - light energy - thermal energy - chemical energy

QUESTION 09 Match

1

	(A)		(B)
1	Sun	a	reflect light rays in one direction
2	Shadow	b	is formed when the light strikes a human body.
3	Moon	c	is the main source of energy
4	Smooth	d	is shiny but is not considered a source of energy

2

	(A)		(B)
1	Gravity	a	the energy stored inside the body.
2	Friction	b	the force that pulls things downwards.
3	Speed	c	a force that arises between the surfaces of two contacted bodies.
4	Potential energy	d	the distance covered per time unit.

3

	(A)		(B)
1	Carbon dioxide	a	process that diaphragm expands and moves up
2	Exhalation	b	the process of pushing air in and out of the body
		c	is a gas that is produced by respiration process

4

	(A)		(B)
1	Jerboa	a	it depends on the body's sense of heat for predation .
2	Snake	b	it depends on the echo of the sound in locating the prey .
3	Bat	c	it depends on its hind legs to jump .

5

	(A)		(B)
1	Tapetum lucidum	a	it is a common organ in the digestive and respiratory systems.
2	Pharynx	b	a muscle that has an important role in the respiration.
		c	a structural adaptation in the eye provides some animal a better vision at night

6

	(A)		(B)
1	Light	a	an animal with a bowl-like face.
2	Owl	b	it is the visible form of energy that is transmitted in the form of waves.
		c	it depends on its hind legs to jump.

7

	(A)		(B)
1	Camouflage	a	it helps us to see.
2	Smell	b	a type of adaptation that helps an animals to hide.
		c	ants use it to communicate.

8

	(A)		(B)
1	Food	a	it can be transformed into potential energy
2	kinetic energy	b	it is a source of energy for humans
3	potential energy	c	it is the stored energy in an object



QUESTION 10 — Answer the following questions

1. Give two examples for Objects that are considered as sources of light.

   ....

2. Give one example for an nocturnal animal that depend on its sense of heat to get their prey

   ....

3. Butterflies that have a color like the color of the tree they live on are called this phenomenon

   ....

4. Rabbits have long and strong hind legs that help them to jump quickly and escape when danger determine the type of adaptation

   ....

5. some dogs live in a cold environment, while some live in a hot environment. In your opinion, which one has thick fur, the cold environment or the hot environment? And why?

   ....

6. A dolphin can locate living organisms and things under the surface of the water and explain the feature that helps the dolphin to do .

   ....

7. When you sit on the chair without moving. What is the name of the force that pulls you downward?

   ....

8. Mention some of the safety equipment in the car?

   ....

9. Find the speed of a runner, if you know that he covers 400 meters in 8 seconds.

   ....

10. A train travels from Cairo to Alexandria in a distance of 200 kilometres in 2 hours, Find its speed

    ....

11. Calculate the speed of a train that. covers 600 km in a time of 6 hours.

    ....

12. **if the two Cars moved at the same time for 20 seconds, car (A) covered a distance of 100 meters, while car (B) covered a distance of 300 meters. Which of the two cars has a higher speed?**

....

....

A

B

13. **Complete after noticing the following figure - What happens until you see this apple?**

- The light falls on the .... then it is reflected on the eyes – so the eyes transmit the message to ....then he interprets it and translates it, so we see the apple.

14. **Look at the following figures, then answer the questions below:**

Figure (a)

Figure (b)

a. The surface in figure (a) is ....Because ....

b. The surface in figure (b) is ....Because....................................

c. In the previous two figures, the falling and reflected rays show that light travels in ....lines.

d. The surface in figure (a) may be ....
(plastic - wood - **mirror** - cloth)

15. Which of these cars is affected by greater force ? (give reason for your answer)

....

ORIGINAL POINT
70 CM
A
35 CM
B

16. Note the following two figures.

a. Identify the name of each of the two processes in Figures 1, 2: -

....

b. What happens to the diaphragm in Figure (1).

....

(1) (2)

انتهت الأسئلة مع اطيب الامنيات بالنجاح والتوفيق

الصف
الرابع
الابتدائي
٢٠٢٣

بنك أسئلة

المتميز

أ/ محمود سعيد

Model Answers

SCIENCE

Final Revision

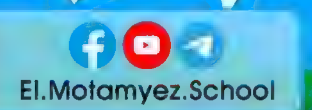
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cartoon science









EL MOTAMYEZ - SCIENCE Questions Bank

FINAL REVISION

QUESTION 01 Choose The Correct Answer

1. When a panther chameleon stands on leaves of trees, the color of its scales changes into......
   - (a) white (b) **green** (c) blue (d) black
2. The fur of fennec fox protect it from.........
   - (a) wind (b) rains (c) **hot weather** (d) cold weather
3. One of the behavioral adaptations that help the animal protect itself from enemies
   - (a) **Camouflage** (b) extinction (c) immigration (d) reproduction
4. Bat is......animal.
   - (a) **nocturnal** (b) morning (c) Harmful (d) don't fly
5. .... is covering body arctic fox
   - (a) heavy hair (b) heavy skin (c) **thick fur** (d) many feathers
6. ....panting to lower her body temperature.
   - (a) Whales (b) Lions (c) **Foxes** (d) Bats
7. Animals that live in a hot environment have .... ears to help her, and allow heat to escape to be cool.
   - (a) small (b) short (c) sharp (d) **long**
8. Fish extracts oxygen out of the water by ......
   - (a) skin (b) **gills** (c) lungs (d) fins
9. which of the following can turn its head in all directions ?
   - (a) lizards (b) **owls** (c) cats (d) snakes
10. When you determine a sweet or bitter taste, you have used ....
    - (a) **the tongue** (b) the eye (c) the ear (d) the nose
11. The sense you use to identify the scent of a perfume.
    - (a) taste (b) sight (c) **smell** (d) hearing
12. Your sensation of hot weather depends on sensory receptors in the ......
    - (a) eyes (b) **skin** (c) nose (d) ears
13. What carries the message from your eyes to your brain when you see something...
    - (a) **nerves** (b) muscle (c) veins (d) glands



14. The ....system helping us to translate messages that come from our surroundings, such as smells and sounds.
 ⓐ respiratory ⓑ digestive ⓒ nervous ⓓ circulatory

15. .... energy affects the sensory receptors in the eye causing vision.
 ⓐ Magnetic ⓑ Light ⓒ Kinetic ⓓ Sound

16. The organ which is responsible for smelling sense
 ⓐ ear ⓑ tongue ⓒ nose ⓓ eye

17. All the following components are from the nervous system except.................
 ⓐ spinal cord ⓑ heart ⓒ nerves ⓓ brain

18. The ....is the main control center in your body.
 ⓐ nerve ⓑ brain ⓒ spinal cord ⓓ sense

19. The system helps us translate messages that come from our surroundings, such as smells and sounds
 ⓐ respiratory ⓑ digestive ⓒ nervous ⓓ circulatory

20. When can object comes suddenly close to your eyes............... occurs
 ⓐ reflex action ⓑ respiration ⓒ sensory organ ⓓ sleeping

21. All the following living organisms have Tapetum Lucidum, except...........
 ⓐ snakes ⓑ fishing cats ⓒ dogs ⓓ horses

22. Which type of energy does the sun provide Earth?
 ⓐ light ⓑ gravity ⓒ chemical ⓓ mechanical

23. The organ responsible for the sense of sight
 ⓐ the ear ⓑ the tongue ⓒ the nose ⓓ the eye

24. Animals can communicate with each other through..............
 ⓐ sounds and light ⓑ talking ⓒ writing ⓓ reading

25. All of these materials are opaque except
 ⓐ wood ⓑ human body ⓒ book ⓓ water

26. Which of the following is a source of light?
 ⓐ the moon ⓑ our eyes ⓒ fire ⓓ a mirror

27. To detect the place of a table in a completely dark room, you can depend on
 ⓐ sight sense ⓑ touch sense ⓒ taste sense ⓓ hearing sense

28. Each of the following is considered a source of light except ....
 ⓐ the fire ⓑ the sun ⓒ the lamp ⓓ the eye



29. ....eyes have a thin membrane in the back of the eye.
ⓐ Human ⓑ Tarsier monkey ⓒ Snake ⓓ Bats

30. All of the following are transparent objects, except ....
ⓐ glass ⓑ water. ⓒ paper ⓓ air

31. it produces chemical reaction inside its body.......................
ⓐ butterflies ⓑ fireflies beetles ⓒ house flies ⓓ owl

32. the mating season of humpback whales
ⓐ summer ⓑ winter ⓒ spring ⓓ fall

33. Both tarsier and owl, ...
ⓐ can swim ⓑ can fly ⓒ are nocturnal animals ⓓ same species

34. What happens to light when it hits a rough surface?
ⓐ scattering ⓑ reflection ⓒ absorption ⓓ refraction

35. Which of the following organs are working together for seeing different objects?
ⓐ Nose and brain ⓑ Eyes and brain ⓒ Ears and brain ⓓ Tongue and brain

36. There is a tapetum lucidum in all of the following except ....
ⓐ the horse ⓑ the cat ⓒ the human ⓓ the dog

37. All the following considered as a source of light except ....
ⓐ sun ⓑ candle ⓒ fire ⓓ moon

38. Which of the following allows the light to pass through it? ....
ⓐ A rock ⓑ Moon ⓒ Wood ⓓ Glass

39. What property of light helps you see yourself in a mirror?
ⓐ refraction ⓑ reflection ⓒ absorption ⓓ relativity

40. Reading and writing are common types of communication between ....
ⓐ human ⓑ animals ⓒ birds ⓓ plants

41. Raising the thumb up or lower it down is a kind of ....
ⓐ colors ⓑ codes ⓒ waves ⓓ lights

42. Bats use their .... To get information about their surroundings in the dark
ⓐ eyes ⓑ tongue ⓒ ears ⓓ hands

43. The force that slows down (decreases) the speed is called ....
ⓐ push ⓑ gravity ⓒ friction ⓓ pull

44 Senses organs collect information and send signals to ....for processing and understanding

ⓐ stomach ⓑ **brain** ⓒ hands ⓓ ear

45 When an object is in motion, this means that its ....changes

ⓐ color ⓑ shape ⓒ size ⓓ **position**

46 When you move something towards you, this represents......

ⓐ pushing force ⓑ light energy ⓒ **pulling force** ⓓ sound energy

47 All the following represent the pushing force except to ......

ⓐ kick a ball ⓑ press on switch ⓒ close drawer ⓓ **lifting up a bag.**

48 When you sit on a chair, the force of gravity is ....and holding you in the chair

ⓐ pull you upward ⓑ **pull you downward** ⓒ push you upward ⓓ push you downward

49 Push or pull actions are considered as types of ....

ⓐ **force** ⓑ device ⓒ energy ⓓ adaptation

50 The force that pulls the objects down toward the center of the earth is ...

ⓐ **gravity** ⓑ pushing ⓒ pulling ⓓ wind

51 The force that occurs when an object rubs against another object is called.....

ⓐ **friction** ⓑ gravity ⓒ push ⓓ pull

52 The airbag is made of..........

ⓐ carton ⓑ **nylon** ⓒ rubber ⓓ cotton

53 Kinetic energy isn't affected by the............

ⓐ mass ⓑ speed ⓒ **color** ⓓ weight

54 All of the following are examples of pulling force, except ....

ⓐ **kicking a ball.** ⓑ pulling the rope.
ⓒ opening the desk's drawer. ⓓ lifting up your bag.

55 When a body moves forward, the change that occurs is in ....

ⓐ **the position of the body.** ⓑ the Earth's gravity.
ⓒ the size of the body. ⓓ the mass of the body.

56 Objects need a force to move, this force is represented in (called) ....

ⓐ pushing only ⓑ pulling only
ⓒ **pushing and pulling together** ⓓ the Earth gravity only

57 When a ball stands on the ground without moving, the forces acting on it are ......



ⓐ balanced. ⓑ unbalanced ⓒ push it up ⓓ not equal

58 Which of the following can store energy ?

ⓐ battery ⓑ wire ⓒ plastic ⓓ rubber

59 The energy gained by a ball when it falls from above is ....

ⓐ Potential energy ⓑ kinetic energy ⓒ light energy ⓓ chemical energy

60 When an object moves down a ramp, its stored potential energy ....

ⓐ increases ⓑ doesn't change

ⓒ changes to a less active form of energy ⓓ changes to a more active form of energy

61 The energy that is stored in an object due to its position, is known as .....

ⓐ kinetic ⓑ potential ⓒ electric ⓓ chemical

62 Chemical energy stored in batteries is considered a form of .... energy

ⓐ potential ⓑ kinetic ⓒ heat ⓓ light

63 Chemical energy can be stored in ....

ⓐ food only ⓑ battery only ⓒ television and food ⓓ food and battery

64 The force that causes an object to move a distance is called ....

ⓐ work ⓑ potential ⓒ gravity ⓓ pull

65 The ability to do work is ....

ⓐ energy ⓑ force ⓒ push ⓓ pull

66 The speed of a car that travels 200 meter in 2 second is......m/s

ⓐ 20 ⓑ 40 ⓒ 100 ⓓ 200

67 How can we calculate the speed of an object ?

ⓐ distance ÷ time ⓑ distance + time

ⓒ distance x time ⓓ distance - time

68 Which of the following is a measuring unit of speed?

ⓐ hr/km ⓑ sec/m ⓒ kg/sec ⓓ m/sec

QUESTION 02 Complete using words between brackets

1 ....causes many problems for the lungs (Breathing – pollution)

2 Fish breathe ..... gas which dissolved in water (Oxygen - carbon dioxide)

3 .... mix and grind food inside the mouth (Teeth only - Teeth and tongue)

4. Mangroves trees grow in......(Fresh water - <u>salt water)</u>

5. During exhalation,.......... gas comes out of the lung.
(Oxygen -<u>Carbon dioxide)</u>

6. The lungs are one of the important organs in the ....system.
(<u>Respiratory</u> - Digestive)

7. The diaphragm rises up during the ....operation
(inhalation - <u>exhalation)</u>

8. A tube with muscles that help push food into the stomach, called......
(Trachea – <u>esophagus</u>)

9. The fatty layer under the animal's skin to warm it is considered a............adaptation (<u>structural</u> – behavioral)

10. An animal that can escape from enemies because of the length of its hind leg. (Arctic fox - <u>jerboa</u>)

11. The dolphin can locate its prey through its sense............(<u>hearing</u> - sight)

12. The eyes send messages to ...... through the nerves.(<u>brain</u>-spinal cord)

13. Sensory receptors send a message...........
(from the brain to the muscles- <u>from the sensory organs to the brain</u>)

14. The time that the body takes to receive information from the environment and (<u>reaction time</u>-reflex action)

15. The echo sound feature depends on ....(<u>Hearing sense</u> - Sight sense)

16. The skin is an important organ of the system... (Respiratory - <u>Nervous</u>)

17. The spinal cord is an important organ of the ....system
(<u>Nervous</u> - Digestive)

18. The car slow down its speed when it runs out of fuel, as a result of ....
(tension – <u>friction</u>)

19. The (balanced – <u>unbalanced</u>) forces cause the object to move .

20. The force that pulls things down is .... (friction – <u>gravity</u>)

21. When a person push car forward, his body begins to sweat heavily because his body .... his stored energy (increase – <u>consumes</u>)

22. The gas oven converts .... energy stored in the natural gas into heat energy (<u>chemical</u> - electrical)

23. During a car crash, the .... is inflated with a gas to provide a soft cushion.(seatbelt - <u>airbag</u>)



24 When objects crash with each other, ... transfers between them. (distance - **energy**)

25 As a result of hitting a ball with a bat, the ....of the ball will change (**direction** – mass)

26 Speed is a........................ quantity.(**physical**- chemical)

27 Fast objects cause.................... dangers than the slow objects.(less- **more**)

28 The big trucks need.................. to move. (**big engines** -small engines)

29 When the car fuel is completely runs out, the car's.......... becomes zero. (mass - **speed**)

30 The car needs............. to move.(**fuel** - water)

31 If Noor travels with her bicycle a distance of 10 km in two hours, then she is moving at a speed of (10 - **5**) km/hr

32 Cats' eyes are adapted to night vision due to the presence of .... Behind their eyes (**Tapetum lucidum** - small eyes)

33 When light falls on an object and the light.........,so we can see this object. (absorb - **reflects**)

34 The eye sends messages to .... through the nerves. (**brain** - spinal cord)

35 When light is absorbed by an opaque object, ... is formed. (tapetum lucidum – **shadow**)

36 .... is from the opaque objects. (**Carton** - Glass)

37 Tarsier Monkey can turn its (eyes-**head**) like owls.

38 Light rays travel in the form of (curved - **straight**) lines in air.

39 Bees can communicate with each other by..................(**dancing** - smell)

40 The songs of Hamp back whales have a.....................pitch in summer. (higher – **lower**)

41 From the organs that we can use to end or receive the code (**eye** – heart)

42 .... are forms of codes(**thumb up and down** - swimming)

43 Humpback whales communicate with each other through the ....sense (**hearing** - smelling)

QUESTION 03 Put (√) or (x) or the following statements:

1. The ears of arctic fox are longer than those of fennec fox ✗
2. All type of sharks live in fresh water. ✗
3. Foxes have a strong sense of hearing. ✓
4. The respiratory system is responsible for the entry of air into the body. ✓
5. Exhaled air is loaded with oxygen ✗
6. When running and making an effort, the number of breathing times decreases . ✗
7. As the speed increases, the amount of fuel used decreases. ✗
8. The feet of the penguin do not freeze because they have a layer of fat. ✗
9. Man cannot restore the ecosystem with any way ✗
10. The migration of birds to search for food is considered a form of behavioural adaptation ✓
11. Some animals that live in cold have a long ears; To help it to maintain the body temperature ✗
12. Plants need long roots that extend deep into the soil to survive in the water scarce ✓
13. Animals digging trenches is a form of structural adaptation ✗
14. The mass of a moving body affects its speed. ✓
15. After collision, the air bag deflates the same speed as it inflates ✓
16. The sense of hearing of dolphin is stronger than that of human ✓
17. The ear is the sense organ responsible for seeing objects ✗
18. The brain responsible for processing information ✓
19. Bats use their sense of smell to avoid dangers ✗
20. Snakes have the ability to rotate their heads in all directions ✗
21. A person can identify food which is not good through the sense of hearing ✗
22. Bees can know the sweet taste by their sense of smell ✗
23. The nervous system works separately from the five senses. ✗
24. The skin is the sensory organ that makes you feel the smooth of the cloth ✓

25	Nocturnal animals have eyes larger than human	✓
26	Cats have excellent night vision, while snakes and bats are not	✗
27	Tarsier cannot move its big eyes in their sockets like owl	✓
28	Wood is a transparent object that allows light to pass through it	✗
29	If I can see my face clearly on a surface, this means that it is a smooth, shiny surface	✓
30	honeybees use movement to communicate with each others	✓
31	The human eyes can see in the dark clearly.	✗
32	Tarsier Monkey and owl have poor night vision.	✗
33	The moon is a source of light	✗
34	The wooden board reflects light less than the mirror	✓
35	Human has a tapetum lucidum in his eye to help him see at night	✗
36	painted surface reflects light in one direction	✗
37	Some animals can see at night, such as a wild cat	✓
38	shadow formed when light hits transparent object	✗
39	Both humans and animals need a source of light to see	✓
40	The opaque materials do not let the light pass through	✓
41	Tapetum lucidum of fishing cat considered as a structural adaptation.	✓
42	Fishing cat has a mirror-like membrane on the back of the eye	✓
43	Whales sing with a high pitched sound during the mating season	✓
44	Humpback whales can sing under water	✓
45	In order to translate the code, the brain must identify it	✓
46	Animals can use more than one senses to communicate with each other	✓
47	Bees can know the sweet taste by their sense of smell	✗
48	Both Morse code and humpback whale can use sound energy in communication	✓
49	Bats use their sense of smell to avoid dangers	✗
50	Air resists the motion of a car.	✓
51	Drivers should drive as fast as possible to avoid accidents	✗
52	The stopping object can't move until a force acts on it	✓

53. Gravitational force is an upward pulling force ✗
54. When a pen falls down from your hand, the acting force is the gravity force ✓
55. When the static body is affected by balanced force, the body moves ✗
56. The seesaw moves up and down because the forces that act on it are unbalanced ✓
57. When the position of the body changes from a fixed point, the body moves ✓
58. The force that slows down or decreases the speed of an object is gravity. ✗
59. Gravity pulls objects towards the center of the Earth. ✓
60. 📖 Any moving object has a form of energy known as kinetic energy. ✓
61. When the roller coaster slides down fast, its kinetic energy increases ✓
62. The moving objects only have energy, while the objects that don't move have no energy ✗
63. When you kick a ball, kinetic energy is produced ✓
64. As the height of an object from the Earth's surface increases, its potential energy decreases ✗
65. In the electric fan, the kinetic energy is converted into electric energy. ✗
66. Energy is neither destroyed nor created from nothing. ✓
67. A static ball moves on the ground if it is affected by a force. ✓
68. The chemical energy in a battery can be converted into electrical energy. ✓
69. 📖 Energy is the ability to do work ✓
70. 📖 Seatbelt is one of safety equipment in cars. ✓
71. The high-speed moving objects face less dangers than the slower objects. ✗

QUESTION 04 — Complete the following sentences

1. 📖 Panther chameleon puffs up its body with air for defense which is considered <u>behavioral</u> adaptation
2. 📖 Fish breath <u>oxygen</u> gas which dissolved in water .

3 The system that digests food to produce energy is **digestive system**

4 Chameleons can move each of their eyes in a different direction, this adaptation helps them to **catch prey – find food**

5 Leaves of plants that float above the surface of the water are so wide that they can **absorb sunlight**

6 Animals that have a thick layer of fat under the skin are animals that live in a **cold** environment

7 A tube with muscles that helps to push food into the stomach, is called **esophagus**

8 The dolphin has sharp sense of **hearing**

9 The eye sends messages to **brain** through the nerves.

10 The spinal cord is an important organ of the **nervous** system.

11 The form energy that can be seen is **light** energy.

12 Air and water are **transparent** materials and you can see things through them

13 Some animals have the ability to see in the dark because of **Tapetum lucidum**

14 Smooth surfaces reflect light in **one** direction.

15 I saw an eye shining in the dark, this animal could be **(cat (nocturnal animal))**

16 You can see the objects due to the **reflection** of light rays to the eyes

17 The eye pupil of the owl and cats is **wider** than the eye pupil of the human

18 **sun** , **candle** and **fire** are sources of light

19 Fireflies communicate with each other by producing a **light**

20 Morse code is way of communication depending first on **hearing** sense

21 The echo is turned in to vibrations in the **blind person cane** that is good by blind people .

22 The winter months are considered as the **matting** season for humpback whales.

23 A group of ants sends **smelly** message to communicate with each other.

24. Bats cannot see in the dark, but they hunt their prey at night because of echolocation
25. Both fireflies and honey bees use the sense of sight in their communication .
26. If the mass of an object decreases this mean that its kinetic energy decrease
27. The energy which is stored in a ball at the top of a hill is gravitional potential energy .
28. Airbags absorbs the energy of the car during collision..
29. When objects collide with each other, energy is transferred between them.

QUESTION 05 Write the scientific term

1	A type of adaptation that helps an animal to hide	camouflage
2	A liquid substance in the mouth that moistens food and begins to break it down	saliva
3	A change in the body structure of a living organism to survive	structural adaptation
4	A system that helps in breaking down food into smaller parts	Digestive system
5	A process of breaking down food into smaller parts that the body cells absorb and use to get energy and growth	digestion process
6	A change in the behaviors or acts of a living organism to survive	behavioral adaptation
7	A gas presents in air that living organisms breath during respiration process	oxygen gas
8	A group of organs that work together to perform a specific job	system
9	The first organ in digestive system	mouth
10	A feature in the bull shark, in which the upper surface of its body is darker than lower surface	Countershading
11	The object which allows light to pass through it	transparent object
12	They are materials reflect the light rays in one direction	smooth and shiny material

13	A type of surface that reflects light in different direction.	rough surface
14	An animal can not move its eyes in their sockets	tarsier
15	it is a visible form of energy that travels in form of waves	light
16	A mirror like a membrane at the back of the fishing cat's eye .	tapetum lucidum
17	A tool used by the man works as the eyes of fishing cats at night.	night vision goggles
18	Sense organ that can detect light energy	Eye
19	The force that pulls objects toward the center of the earth .	gravity
20	It is a push or pull that is applied to an object cause it to change its position	force
21	it is the ability to do work	energy
22	it is a force that causes an object to move a distance	work
23	The energy that the object gains due to its motion	kinetic energy
24	The form of energy that increases when the speed of an object increases	kinetic energy
25	The stored energy in an object due to its position	potential energy
26	The process in which two objects or more crash into each other and includes an energy	collision
27	Safety equipment used to prevent car passengers from moving forward when the car stops suddenly	seatbelt
28	safety equipment provide a soft cushion, when it inflates automatically with a gas during collision	airbag
29	A heavy steel ball thot swings on a cable and it is used in destruction of buildings parts	A wrecking ball

QUESTION 06 Give reason..... ?

1. Owls can hunt during the night
   Because owl is nocturnal animals with sharp hearing sense it use echolocation to find prey
2. You can see an object placed behind a glass cup
   Because glass is transparent object allow light to pass through

3. The eyes of human do not glow like dog cats in the dark
   Bec human don't have tapetum lucidum
4. fishing cat eyes glow in the dark
   because it has tapetum lucidum that reflects the light falls on it
5. nocturnal animals can see in the dark
   Because of tapetum lucidum
6. when light fall on object we can see it
   Because of light reflection (light fall from light source on object then it reflect to our eyes)
7. moon is not considered as a source of light
   Because it reflects the light of the sun that falls on it.
8. Humans use reading, writing and speaking
   To communicate with each others
9. Some Animals use echolocation
   To determine the location of living organisms and objects around them

QUESTION 07 What happened if .... ?

1. if a firefly wants to attract a mate to reproduce?
   It use its wings to produce flash light (chemical reaction)
2. A danger becomes close to the colony of ants.
   Solider ants send smelly messages
3. The sound waves produced by a bat hits an insect.
   The sound waves return back to the bat inform of echo so bat can detect the place of insect
4. when the mass of a moving body increases, as it moves down wards along a ramp.
   The kinetic energy will increase

QUESTION 08 cross the odd word

1	Penguin - Polar bear - Snake - Arctic fox	**snake**
2	Cat – Dog – Deer - Bat	**bat**
3	Wood - Glass cup – Book - Wall	**Glass cup**
4	Lamp-Fire-Moon-Candle	**Moon**
5	Bats – fireflies - blind person's cane - dolphins	**Fireflies**
6	Sound energy - light energy - thermal energy - chemical energy	**light energy**

QUESTION 09 Match

1

	(A)		(B)	
1	Sun	a	reflect light rays in one direction	1- c
2	Shadow	b	is formed when the light strikes a human body.	2- b
3	Moon	c	is the main source of energy	3- d
4	Smooth	d	is shiny but is not considered a source of energy	4- a

2

	(A)		(B)	
1	Gravity	a	the energy stored inside the body.	1- b
2	Friction	b	the force that pulls things downwards.	2-c
3	Speed	c	a force that arises between the surfaces of two contacted bodies.	3- d
4	Potential energy	d	the distance covered per time unit.	4- a

3

	(A)		(B)	
1	Carbon dioxide	a	process that diaphragm expands and moves up	1- c
2	Exhalation	b	the process of pushing air in and out of the body	2- a
		c	is a gas that is produced by respiration process	

4

	(A)		(B)	
1	Jerboa	a	it depends on the body's sense of heat for predation .	1- c
2	Snake	b	it depends on the echo of the sound in locating the prey .	2- a
3	Bat	c	it depends on its hind legs to jump .	3- b

5

	(A)		(B)	
1	Tapetum lucidum	a	it is a common organ in the digestive and respiratory systems.	1- c
2	Pharynx	b	a muscle that has an important role in the respiration.	2- a
		c	a structural adaptation in the eye provides some animal a better vision at night	

6

	(A)		(B)	
1	Light	a	an animal with a bowl-like face.	1- b
2	Owl	b	it is the visible form of energy that is transmitted in the form of waves.	2- a
		c	it depends on its hind legs to jump.	

7

	(A)		(B)	
1	Camouflage	a	it helps us to see.	1- b
2	Smell	b	a type of adaptation that helps an animals to hide.	2- c
		c	ants use it to communicate.	

8

	(A)		(B)	
1	Food	a	it can be transformed into potential energy	1- b
2	kinetic energy	b	it is a source of energy for humans	2- a
3	potential energy	c	it is the stored energy in an object	3- c



QUESTION 10 Answer the following questions

1. Give two examples for Objects that are considered as sources of light.

   Sun - candle

2. Give one example for an nocturnal animal that depend on its sense of heat to get their prey

   (snake)

3. Butterflies that have a color like the color of the tree they live on are called this phenomenon

   (Camouflage)

4. Rabbits have long and strong hind legs that help them to jump quickly and escape when danger determine the type of adaptation

   (Structural adaptation)

5. some dogs live in a cold environment, while some live in a hot environment. In your opinion, which one has thick fur, the cold environment or the hot environment? And why?

   (cold environment - to keep its body warm)

6. A dolphin can locate living organisms and things under the surface of the water and explain the feature that helps the dolphin to do .

   Because dolphin use echolocation as it has a strong sense of hearing

7. When you sit on the chair without moving. What is the name of the force that pulls you downward?

   Gravity pulling force

8. Mention some of the safety equipment in the car?

   1 – seatbelt 2- airbag

9. Find the speed of a runner, if you know that he covers 400 meters in 8 seconds.

   Speed $= \frac{\text{distance}}{\text{time}} = \frac{400}{8}$ **= 50 m / sec.**

10. A train travels from Cairo to Alexandria in a distance of 200 kilometres in 2 hours, Find its speed

   Speed $= \frac{\text{distance}}{\text{time}} = \frac{200}{2}$ **= 100 km / hr.**

11 Calculate the speed of a train that. covers 600 km in a time of 6 hours.

Speed = $\frac{\text{distance}}{\text{time}}$ = $\frac{600}{6}$ = 100 km / hr

12 **if the two Cars moved at the same time for 20 seconds, car (A) covered a distance of 100 meters, while car (B) covered a distance of 300 meters. Which of the two cars has a higher speed?**

Speed of car (A) = $\frac{\text{distance}}{\text{time}}$ = $\frac{100}{20}$ = 5 m/sec

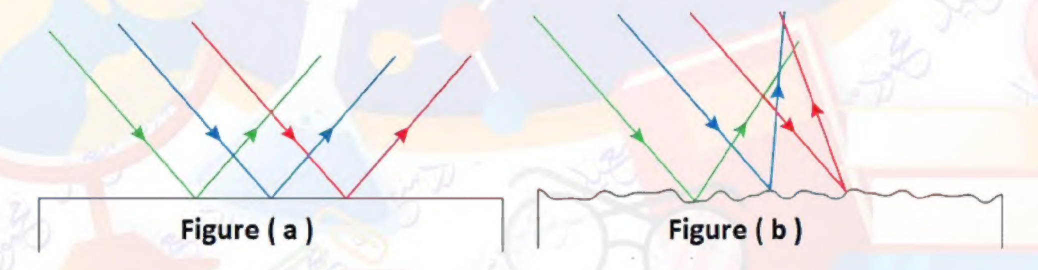
Speed of car (B) = $\frac{\text{distance}}{\text{time}}$ = $\frac{300}{20}$ = 15 m/sec

So car (B) has a higher speed

13 **Complete after noticing the following figure - What happens until you see this apple?**

- The light falls on the **apple** then it is reflected on the eyes – so the eyes transmit the message to **the brain** then he interprets it and translates it, so we see the apple.

14 **Look at the following figures, then answer the questions below:**



a. The surface in figure (a) is **smooth (mirror)** Because **the light rays reflected in one direction**

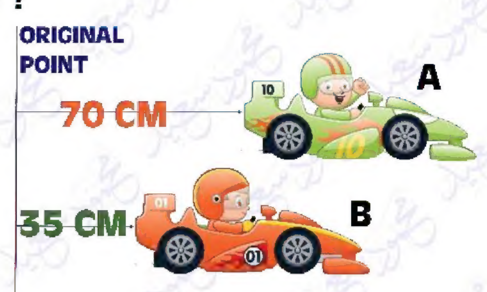
b. The surface in figure (b) is **rough (wood or cloth)** Because **the light rays reflected in different directions**

c. In the previous two figures, the falling and reflected rays show that light travels in **straight** lines.

d. The surface in figure (a) may be ....

(plastic - wood - **mirror** - cloth)

15 Which of these cars is affected by greater force ?
(give reason for your answer)



<u>Car (A) ,because it travels a longer distance</u>

16 <u>Note the following two figures.</u>

a. Identify the name of each of the two processes in Figures 1, 2: -

1- inhalation process

2- exhalation process


(1)


(2)

b. What happens to the diaphragm in Figure (1).

Diaphragm move down

تم بحمد الله

بسم الله الرحمن الرحيم " إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا " صدق الله العظيم